

ABSTRACT

In a thermoelectric conversion material composed of a porous material, continuous electrical conduction paths are provided by forming voids in the form of independent closed pores or independent closed air tubes inside the material. For example, in producing a sintered body of a thermoelectric material, microparticles having a particle diameter of 1 μm or less serving as a void-forming agent are mixed in a base powder, and in sintering, the sintering atmosphere or sintering temperature is controlled so that after the densification of a solid part formed by sintering the base powder proceeds, the microparticles of the void-forming agent are gasified, thereby producing a porous thermoelectric material having a structure in which minute independent closed pores having an average pore diameter of 1 μm or less are dispersed.